

Date: Fri, 2 Sep 94 17:33:05 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V94 #986
To: Info-Hams

Info-Hams Digest Fri, 2 Sep 94 Volume 94 : Issue 986

Today's Topics:

AMSAT/NASA Keplerian File Format
 orbs\$245.1of2.amsat
 orbs\$245.21.amsat
 orbs\$245.2of2.amsat
Ragchewing conversational protocol
Remote Stalling of Automobile Engines
Why Some people hate Wayne Green

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 2 Sep 94 13:59:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: AMSAT/NASA Keplerian File Format
To: info-hams@ucsd.edu

My INTERNET connection now allows 800 lines of text per message.
Therefore, I have condensed the kep files down to just three
files. One has the oscars and the microsats. The second has
the weather and misc satellites. The third has the 2-line
NASA keps per usual.

Nobody wants to get back to two files more than I do, so bare
with me. I'm working on it and hope to have it worked out by
the end of this year.

On another item, the NASA Orbital Information Group has

informed me that they are investigating the K0-25/Object 22828
mixup in the keps. I will keep everyone posted as this
develops.

73,
Ray - WA5QGD
AMSAT-NA Orbital Data Manager

Date: 2 Sep 94 13:50:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: orbs\$245.1of2.amsat
To: info-hams@ucsd.edu

SB KEPS @ AMSAT \$ORBS-245.0
Orbital Elements 245.0SCAR

HR AMSAT ORBITAL ELEMENTS FOR OSCAR SATELLITES
FROM WA5QGD FORT WORTH, TX September 2, 1994
BID: \$ORBS-245.0
TO ALL RADIO AMATEURS BT

Satellite: A0-10
Catalog number: 14129
Epoch time: 94215.22805310
Element set: 295
Inclination: 27.0009 deg
RA of node: 314.8290 deg
Eccentricity: 0.6026240
Arg of perigee: 199.5326 deg
Mean anomaly: 120.6764 deg
Mean motion: 2.05881876 rev/day
Decay rate: -3.02e-06 rev/day^2
Epoch rev: 8375
Checksum: 286

Satellite: U0-11
Catalog number: 14781
Epoch time: 94242.05407815
Element set: 724
Inclination: 97.7858 deg
RA of node: 253.3200 deg
Eccentricity: 0.0012823
Arg of perigee: 37.2927 deg
Mean anomaly: 322.9161 deg
Mean motion: 14.69239557 rev/day
Decay rate: 9.0e-08 rev/day^2

Epoch rev: 56115
Checksum: 306

Satellite: RS-10/11
Catalog number: 18129
Epoch time: 94244.11421328
Element set: 949
Inclination: 82.9230 deg
RA of node: 272.7226 deg
Eccentricity: 0.0011490
Arg of perigee: 166.0203 deg
Mean anomaly: 194.1275 deg
Mean motion: 13.72340703 rev/day
Decay rate: $1.8e-07$ rev/day²
Epoch rev: 36032
Checksum: 269

Satellite: A0-13
Catalog number: 19216
Epoch time: 94244.06465693
Element set: 957
Inclination: 57.7457 deg
RA of node: 233.4755 deg
Eccentricity: 0.7231019
Arg of perigee: 349.2254 deg
Mean anomaly: 1.1276 deg
Mean motion: 2.09726877 rev/day
Decay rate: $-3.19e-06$ rev/day²
Epoch rev: 4760
Checksum: 328

Satellite: F0-20
Catalog number: 20480
Epoch time: 94242.36051676
Element set: 720
Inclination: 99.0483 deg
RA of node: 20.2052 deg
Eccentricity: 0.0540713
Arg of perigee: 171.3929 deg
Mean anomaly: 189.6913 deg
Mean motion: 12.83227880 rev/day
Decay rate: $1.4e-07$ rev/day²
Epoch rev: 21364
Checksum: 286

Satellite: A0-21
Catalog number: 21087
Epoch time: 94243.59191079

Element set: 507
Inclination: 82.9402 deg
RA of node: 86.9165 deg
Eccentricity: 0.0033651
Arg of perigee: 233.2799 deg
Mean anomaly: 126.5239 deg
Mean motion: 13.74543749 rev/day
Decay rate: 9.3e-07 rev/day^2
Epoch rev: 17994
Checksum: 337

Satellite: RS-12/13
Catalog number: 21089
Epoch time: 94242.58574686
Element set: 724
Inclination: 82.9246 deg
RA of node: 316.2773 deg
Eccentricity: 0.0027677
Arg of perigee: 261.9904 deg
Mean anomaly: 97.8111 deg
Mean motion: 13.74045626 rev/day
Decay rate: 4.9e-07 rev/day^2
Epoch rev: 17886
Checksum: 349

Satellite: ARSENE
Catalog number: 22654
Epoch time: 94243.05287604
Element set: 275
Inclination: 2.0332 deg
RA of node: 96.0279 deg
Eccentricity: 0.2914017
Arg of perigee: 190.0489 deg
Mean anomaly: 163.3275 deg
Mean motion: 1.42202991 rev/day
Decay rate: -1.07e-06 rev/day^2
Epoch rev: 226
Checksum: 270

/EX

SB KEPS @ AMSAT \$ORBS-245.D
Orbital Elements 245.MICROS

HR AMSAT ORBITAL ELEMENTS FOR THE MICROSATS
FROM WA5QGD FORT WORTH, TX September 2, 1994
BID: \$ORBS-245.D
TO ALL RADIO AMATEURS BT

Satellite: UO-14
Catalog number: 20437
Epoch time: 94242.19112035
Element set: 25
Inclination: 98.5882 deg
RA of node: 325.9562 deg
Eccentricity: 0.0011195
Arg of perigee: 338.6747 deg
Mean anomaly: 21.3973 deg
Mean motion: 14.29853286 rev/day
Decay rate: $1.2\text{e-}07$ rev/day²
Epoch rev: 24016
Checksum: 298

Satellite: AO-16
Catalog number: 20439
Epoch time: 94243.22354761
Element set: 823
Inclination: 98.5968 deg
RA of node: 328.2876 deg
Eccentricity: 0.0011378
Arg of perigee: 336.3042 deg
Mean anomaly: 23.7623 deg
Mean motion: 14.29907282 rev/day
Decay rate: $4.0\text{e-}08$ rev/day²
Epoch rev: 24032
Checksum: 306

Satellite: DO-17
Catalog number: 20440
Epoch time: 94242.19101324
Element set: 824
Inclination: 98.5966 deg
RA of node: 327.6156 deg
Eccentricity: 0.0011538
Arg of perigee: 338.5461 deg
Mean anomaly: 21.5240 deg
Mean motion: 14.30046939 rev/day
Decay rate: $-2.0\text{e-}08$ rev/day²
Epoch rev: 24019
Checksum: 279

Satellite: WO-18
Catalog number: 20441
Epoch time: 94243.21721374
Element set: 826
Inclination: 98.5975 deg
RA of node: 328.6270 deg

Eccentricity: 0.0012285
Arg of perigee: 335.7331 deg
Mean anomaly: 24.3277 deg
Mean motion: 14.30021068 rev/day
Decay rate: 6.0e-08 rev/day^2
Epoch rev: 24034
Checksum: 280

Satellite: L0-19

Catalog number: 20442
Epoch time: 94242.28078981
Element set: 822
Inclination: 98.5981 deg
RA of node: 327.9775 deg
Eccentricity: 0.0012453
Arg of perigee: 337.8186 deg
Mean anomaly: 22.2455 deg
Mean motion: 14.30117960 rev/day
Decay rate: 2.0e-08 rev/day^2
Epoch rev: 24022
Checksum: 305

Satellite: U0-22

Catalog number: 21575
Epoch time: 94241.73824273
Element set: 527
Inclination: 98.4306 deg
RA of node: 314.7329 deg
Eccentricity: 0.0008686
Arg of perigee: 70.4243 deg
Mean anomaly: 289.7874 deg
Mean motion: 14.36929130 rev/day
Decay rate: 3.5e-07 rev/day^2
Epoch rev: 16364
Checksum: 323

Satellite: K0-23

Catalog number: 22077
Epoch time: 94243.11394838
Element set: 422
Inclination: 66.0839 deg
RA of node: 123.1079 deg
Eccentricity: 0.0015430
Arg of perigee: 270.1307 deg
Mean anomaly: 89.7937 deg
Mean motion: 12.86286549 rev/day
Decay rate: -3.7e-07 rev/day^2
Epoch rev: 9642

Checksum: 315

Satellite: A0-27

Catalog number: 22825

Epoch time: 94241.75642219

Element set: 320

Inclination: 98.6479 deg

RA of node: 316.8078 deg

Eccentricity: 0.0009042

Arg of perigee: 359.3250 deg

Mean anomaly: 0.7917 deg

Mean motion: 14.27632689 rev/day

Decay rate: 7.0e-08 rev/day²

Epoch rev: 4818

Checksum: 319

Satellite: I0-26

Catalog number: 22826

Epoch time: 94243.20374381

Element set: 320

Inclination: 98.6495 deg

RA of node: 318.2912 deg

Eccentricity: 0.0009468

Arg of perigee: 356.6267 deg

Mean anomaly: 3.4849 deg

Mean motion: 14.27737479 rev/day

Decay rate: 3.0e-08 rev/day²

Epoch rev: 4839

Checksum: 330

Satellite: K0-25

Catalog number: 22830

Epoch time: 94242.21639135

Element set: 326

Inclination: 98.5471 deg

RA of node: 313.7710 deg

Eccentricity: 0.0011188

Arg of perigee: 324.2674 deg

Mean anomaly: 35.7752 deg

Mean motion: 14.28061512 rev/day

Decay rate: -8.0e-08 rev/day²

Epoch rev: 4826

Checksum: 287

Satellite: 22828

Catalog number: 22828

Epoch time: 94242.63629114

Element set: 298

Inclination: 98.6425 deg
RA of node: 317.7435 deg
Eccentricity: 0.0010301
Arg of perigee: 343.9905 deg
Mean anomaly: 16.0951 deg
Mean motion: 14.28064245 rev/day
Decay rate: 2.1e-07 rev/day^2
Epoch rev: 1640
Checksum: 300

/EX

Date: 2 Sep 94 13:56:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: orbs\$245.21.amsat
To: info-hams@ucsd.edu

SB KEPS @ AMSAT \$ORBS-245.N
2Line Orbital Elements 245.AMSAT

HR AMSAT ORBITAL ELEMENTS FOR AMATEUR SATELLITES IN NASA FORMAT
FROM WA5QGD FORT WORTH,TX September 2, 1994
BID: \$ORBS-245.N

DECODE 2-LINE ELSETS WITH THE FOLLOWING KEY:

1 AAAAAU 00 0 0 BBBB.BBBBBBBB .CCCCCCC 00000-0 00000-0 0 DDDZ
2 AAAAA EEE.EEEE FFF.FFFF GGGGGGG HHH.HHHH III.IIII JJ.JJJJJJJKKKKKZ
KEY: A-CATALOGNUM B-EPOCHTIME C-DECAY D-ELSETNUM E-INCLINATION F-RAAN
G-ECCENTRICITY H-ARGPERIGEE I-MNANOM J-MNMOTION K-ORBITNUM Z-CHECKSUM

TO ALL RADIO AMATEURS BT

A0-10

1 14129U 83058B 94215.22805310 -.00000302 00000-0 10000-3 0 2952
2 14129 27.0009 314.8290 6026240 199.5326 120.6764 2.05881876 83753

U0-11

1 14781U 84021B 94242.05407815 .00000009 00000-0 94214-5 0 7247
2 14781 97.7858 253.3200 0012823 37.2927 322.9161 14.69239557561151

RS-10/11

1 18129U 87054A 94244.11421328 .00000018 00000-0 35197-5 0 9494
2 18129 82.9230 272.7226 0011490 166.0203 194.1275 13.72340703360321

A0-13

1 19216U 88051B 94244.06465693 -.00000319 00000-0 10000-4 0 9576
2 19216 57.7457 233.4755 7231019 349.2254 1.1276 2.09726877 47609

FO-20

1 20480U 90013C 94242.36051676 .00000014 00000-0 99901-4 0 7201

2	20480	99.0483	20.2052	0540713	171.3929	189.6913	12.83227880	213646
AO-21								
1	21087U	91006A	94243.5919	1079	.00000093	00000-0	82657-4	0 5076
2	21087	82.9402	86.9165	0033651	233.2799	126.5239	13.74543749	179948
RS-12/13								
1	21089U	91007A	94242.5857	4686	.00000049	00000-0	36517-4	0 7242
2	21089	82.9246	316.2773	0027677	261.9904	97.8111	13.74045626	178867
ARSENE								
1	22654U	93031B	94243.0528	7604	-.00000107	00000-0	00000 0 0	2754
2	22654	2.0332	96.0279	2914017	190.0489	163.3275	1.42202991	2266
UO-14								
1	20437U	90005B	94242.1911	2035	.00000012	00000-0	21614-4	0 254
2	20437	98.5882	325.9562	0011195	338.6747	21.3973	14.29853286	240161
AO-16								
1	20439U	90005D	94243.2235	4761	.00000004	00000-0	18510-4	0 8233
2	20439	98.5968	328.2876	0011378	336.3042	23.7623	14.29907282	240320
DO-17								
1	20440U	90005E	94242.1910	1324	-.00000002	00000-0	16333-4	0 8246
2	20440	98.5966	327.6156	0011538	338.5461	21.5240	14.30046939	240192
WO-18								
1	20441U	90005F	94243.2172	1374	.00000006	00000-0	19210-4	0 8266
2	20441	98.5975	328.6270	0012285	335.7331	24.3277	14.30021068	240340
LO-19								
1	20442U	90005G	94242.2807	8981	.00000002	00000-0	17882-4	0 8227
2	20442	98.5981	327.9775	0012453	337.8186	22.2455	14.30117960	240227
UO-22								
1	21575U	91050B	94241.7382	4273	.00000035	00000-0	26496-4	0 5277
2	21575	98.4306	314.7329	0008686	70.4243	289.7874	14.36929130	163642
KO-23								
1	22077U	92052B	94243.1139	4838	-.00000037	00000-0	10000-3	0 4221
2	22077	66.0839	123.1079	0015430	270.1307	89.7937	12.86286549	96423
AO-27								
1	22825U	93061C	94241.7564	2219	.00000007	00000-0	20508-4	0 3208
2	22825	98.6479	316.8078	0009042	359.3250	0.7917	14.27632689	48182
IO-26								
1	22826U	93061D	94243.2037	4381	.00000003	00000-0	19182-4	0 3205
2	22826	98.6495	318.2912	0009468	356.6267	3.4849	14.27737479	48394
KO-25								
1	22830U	93061H	94242.2163	9135	-.00000008	00000-0	14107-4	0 3265
2	22830	98.5471	313.7710	0011188	324.2674	35.7752	14.28061512	48269
22828								
1	22828U	93061F	94242.6362	9114	.00000021	00000-0	26070-4	0 2988
2	22828	98.6425	317.7435	0010301	343.9905	16.0951	14.28064245	16405
NOAA-9								
1	15427U	84123A	94243.9050	9731	.00000057	00000-0	54633-4	0 9361
2	15427	99.0438	295.2545	0015393	9.1216	351.0235	14.13638455	500954
NOAA-10								
1	16969U	86073A	94243.9955	0577	-.00000019	00000-0	10011-4	0 8340

2 16969 98.5109 250.6891 0014058 105.3377 254.9360 14.24902995413293
 MET-2/17
 1 18820U 88005A 94243.96464040 .00000032 00000-0 15058-4 0 3841
 2 18820 82.5398 208.2999 0016714 334.4143 25.6185 13.84720194332842
 MET-3/2
 1 19336U 88064A 94242.15978130 .00000051 00000-0 10000-3 0 3199
 2 19336 82.5395 271.3391 0018506 78.3862 281.9328 13.16968674292991
 NOAA-11
 1 19531U 88089A 94243.97944079 .00000023 00000-0 37681-4 0 7546
 2 19531 99.1801 234.7722 0011181 284.4289 75.5640 14.13012703305844
 MET-2/18
 1 19851U 89018A 94242.52167153 .00000045 00000-0 26655-4 0 3206
 2 19851 82.5176 84.6624 0015414 22.2797 337.9045 13.84371599277972
 MET-3/3
 1 20305U 89086A 94244.16711031 .00000044 00000-0 10000-3 0 1336
 2 20305 82.5522 217.4430 0008799 114.5975 245.6092 13.04420054232808
 MET-2/19
 1 20670U 90057A 94242.17954897 -.00000092 00000-0 -95401-4 0 8239
 2 20670 82.5491 149.7088 0015129 305.3559 54.6190 13.84183191210851
 FY-1/2
 1 20788U 90081A 94244.29926690 -.00000027 00000-0 10000-4 0 579
 2 20788 98.8298 262.0041 0015864 157.4247 202.7856 14.01340656204365
 MET-2/20
 1 20826U 90086A 94242.57871919 .00000040 00000-0 22455-4 0 8321
 2 20826 82.5228 86.7987 0012377 195.3428 164.7359 13.83588541198047
 MET-3/4
 1 21232U 91030A 94242.57520294 .00000050 00000-0 10000-3 0 7300
 2 21232 82.5432 117.0195 0014105 4.7692 355.3559 13.16464239161146
 NOAA-12
 1 21263U 91032A 94243.95238147 .00000097 00000-0 62726-4 0 1614
 2 21263 98.6135 270.0474 0013611 20.8464 339.3267 14.22443392171273
 MET-3/5
 1 21655U 91056A 94242.51744687 .00000051 00000-0 10000-3 0 7362
 2 21655 82.5498 64.2470 0014156 16.0571 344.0976 13.16833950146246
 MET-2/21
 1 22782U 93055A 94243.24645844 .00000089 00000-0 67543-4 0 3329
 2 22782 82.5514 146.9692 0023665 18.4976 341.7038 13.83014037 50463
 POSAT
 1 22829U 93061G 94243.20371906 .00000005 00000-0 19698-4 0 3134
 2 22829 98.6454 318.3232 0010119 342.4454 17.6372 14.28038204 48405
 MIR
 1 16609U 86017A 94244.20907121 .00009259 00000-0 13297-3 0 7346
 2 16609 51.6455 166.0427 0001744 4.6582 355.4428 15.56882309487868
 HUBBLE
 1 20580U 90037B 94243.27512226 .000000372 00000-0 21862-4 0 5297
 2 20580 28.4694 113.6263 0006389 152.2878 207.8028 14.90661857 40605
 GRO
 1 21225U 91027B 94241.90549186 .00001692 00000-0 33530-4 0 1328

2 21225 28.4611 80.2748 0003652 327.2031 32.8347 15.41184030 68322
UARS
1 21701U 91063B 94241.39185948 -.00002215 00000-0 -17257-3 0 5833
2 21701 56.9847 225.7000 0004627 110.7536 249.3995 14.96472760161892
/EX

Date: 2 Sep 94 13:54:00 GMT
From: news-mail-gateway@ucsd.edu
Subject: orbs\$245.2of2.amsat
To: info-hams@ucsd.edu

SB KEPS @ AMSAT \$ORBS-245.W
Orbital Elements 245.WEATHER

HR AMSAT ORBITAL ELEMENTS FOR WEATHER SATELLITES
FROM WA5QGD FORT WORTH,TX September 2, 1994
BID: \$ORBS-245.W
TO ALL RADIO AMATEURS BT

Satellite: NOAA-9
Catalog number: 15427
Epoch time: 94243.90509731
Element set: 936
Inclination: 99.0438 deg
RA of node: 295.2545 deg
Eccentricity: 0.0015393
Arg of perigee: 9.1216 deg
Mean anomaly: 351.0235 deg
Mean motion: 14.13638455 rev/day
Decay rate: 5.7e-07 rev/day^2
Epoch rev: 50095
Checksum: 308

Satellite: NOAA-10
Catalog number: 16969
Epoch time: 94243.99550577
Element set: 834
Inclination: 98.5109 deg
RA of node: 250.6891 deg
Eccentricity: 0.0014058
Arg of perigee: 105.3377 deg
Mean anomaly: 254.9360 deg
Mean motion: 14.24902995 rev/day
Decay rate: -1.9e-07 rev/day^2
Epoch rev: 41329
Checksum: 338

Satellite: MET-2/17
Catalog number: 18820
Epoch time: 94243.96464040
Element set: 384
Inclination: 82.5398 deg
RA of node: 208.2999 deg
Eccentricity: 0.0016714
Arg of perigee: 334.4143 deg
Mean anomaly: 25.6185 deg
Mean motion: 13.84720194 rev/day
Decay rate: $3.2\text{e-}07$ rev/day²
Epoch rev: 33284
Checksum: 316

Satellite: MET-3/2
Catalog number: 19336
Epoch time: 94242.15978130
Element set: 319
Inclination: 82.5395 deg
RA of node: 271.3391 deg
Eccentricity: 0.0018506
Arg of perigee: 78.3862 deg
Mean anomaly: 281.9328 deg
Mean motion: 13.16968674 rev/day
Decay rate: $5.1\text{e-}07$ rev/day²
Epoch rev: 29299
Checksum: 339

Satellite: NOAA-11
Catalog number: 19531
Epoch time: 94243.97944079
Element set: 754
Inclination: 99.1801 deg
RA of node: 234.7722 deg
Eccentricity: 0.0011181
Arg of perigee: 284.4289 deg
Mean anomaly: 75.5640 deg
Mean motion: 14.13012703 rev/day
Decay rate: $2.3\text{e-}07$ rev/day²
Epoch rev: 30584
Checksum: 297

Satellite: MET-2/18
Catalog number: 19851
Epoch time: 94242.52167153
Element set: 320
Inclination: 82.5176 deg

RA of node: 84.6624 deg
Eccentricity: 0.0015414
Arg of perigee: 22.2797 deg
Mean anomaly: 337.9045 deg
Mean motion: 13.84371599 rev/day
Decay rate: 4.5e-07 rev/day^2
Epoch rev: 27797
Checksum: 327

Satellite: MET-3/3
Catalog number: 20305
Epoch time: 94244.16711031
Element set: 133
Inclination: 82.5522 deg
RA of node: 217.4430 deg
Eccentricity: 0.0008799
Arg of perigee: 114.5975 deg
Mean anomaly: 245.6092 deg
Mean motion: 13.04420054 rev/day
Decay rate: 4.4e-07 rev/day^2
Epoch rev: 23280
Checksum: 261

Satellite: MET-2/19
Catalog number: 20670
Epoch time: 94242.17954897
Element set: 823
Inclination: 82.5491 deg
RA of node: 149.7088 deg
Eccentricity: 0.0015129
Arg of perigee: 305.3559 deg
Mean anomaly: 54.6190 deg
Mean motion: 13.84183191 rev/day
Decay rate: -9.2e-07 rev/day^2
Epoch rev: 21085
Checksum: 328

Satellite: FY-1/2
Catalog number: 20788
Epoch time: 94244.29926690
Element set: 57
Inclination: 98.8298 deg
RA of node: 262.0041 deg
Eccentricity: 0.0015864
Arg of perigee: 157.4247 deg
Mean anomaly: 202.7856 deg
Mean motion: 14.01340656 rev/day
Decay rate: -2.7e-07 rev/day^2

Epoch rev: 20436
Checksum: 315

Satellite: MET-2/20
Catalog number: 20826
Epoch time: 94242.57871919
Element set: 832
Inclination: 82.5228 deg
RA of node: 86.7987 deg
Eccentricity: 0.0012377
Arg of perigee: 195.3428 deg
Mean anomaly: 164.7359 deg
Mean motion: 13.83588541 rev/day
Decay rate: $4.0\text{e-}07$ rev/day²
Epoch rev: 19804
Checksum: 345

Satellite: MET-3/4
Catalog number: 21232
Epoch time: 94242.57520294
Element set: 730
Inclination: 82.5432 deg
RA of node: 117.0195 deg
Eccentricity: 0.0014105
Arg of perigee: 4.7692 deg
Mean anomaly: 355.3559 deg
Mean motion: 13.16464239 rev/day
Decay rate: $5.0\text{e-}07$ rev/day²
Epoch rev: 16114
Checksum: 272

Satellite: NOAA-12
Catalog number: 21263
Epoch time: 94243.95238147
Element set: 161
Inclination: 98.6135 deg
RA of node: 270.0474 deg
Eccentricity: 0.0013611
Arg of perigee: 20.8464 deg
Mean anomaly: 339.3267 deg
Mean motion: 14.22443392 rev/day
Decay rate: $9.7\text{e-}07$ rev/day²
Epoch rev: 17127
Checksum: 290

Satellite: MET-3/5
Catalog number: 21655
Epoch time: 94242.51744687

Element set: 736
Inclination: 82.5498 deg
RA of node: 64.2470 deg
Eccentricity: 0.0014156
Arg of perigee: 16.0571 deg
Mean anomaly: 344.0976 deg
Mean motion: 13.16833950 rev/day
Decay rate: 5.1e-07 rev/day^2
Epoch rev: 14624
Checksum: 308

Satellite: MET-2/21
Catalog number: 22782
Epoch time: 94243.24645844
Element set: 332
Inclination: 82.5514 deg
RA of node: 146.9692 deg
Eccentricity: 0.0023665
Arg of perigee: 18.4976 deg
Mean anomaly: 341.7038 deg
Mean motion: 13.83014037 rev/day
Decay rate: 8.9e-07 rev/day^2
Epoch rev: 5046
Checksum: 311

/EX

SB KEPS @ AMSAT \$ORBS-245.M
Orbital Elements 245.MISC

HR AMSAT ORBITAL ELEMENTS FOR MANNED AND MISCELLANEOUS SATELLITES
FROM WA5QGD FORT WORTH, TX September 2, 1994
BID: \$ORBS-245.M
TO ALL RADIO AMATEURS BT

Satellite: POSAT
Catalog number: 22829
Epoch time: 94243.20371906
Element set: 313
Inclination: 98.6454 deg
RA of node: 318.3232 deg
Eccentricity: 0.0010119
Arg of perigee: 342.4454 deg
Mean anomaly: 17.6372 deg
Mean motion: 14.28038204 rev/day
Decay rate: 5.0e-08 rev/day^2
Epoch rev: 4840
Checksum: 266

Satellite: MIR
Catalog number: 16609
Epoch time: 94244.20907121
Element set: 734
Inclination: 51.6455 deg
RA of node: 166.0427 deg
Eccentricity: 0.0001744
Arg of perigee: 4.6582 deg
Mean anomaly: 355.4428 deg
Mean motion: 15.56882309 rev/day
Decay rate: 9.259e-05 rev/day^2
Epoch rev: 48786
Checksum: 318

Satellite: HUBBLE
Catalog number: 20580
Epoch time: 94243.27512226
Element set: 529
Inclination: 28.4694 deg
RA of node: 113.6263 deg
Eccentricity: 0.0006389
Arg of perigee: 152.2878 deg
Mean anomaly: 207.8028 deg
Mean motion: 14.90661857 rev/day
Decay rate: 3.72e-06 rev/day^2
Epoch rev: 4060
Checksum: 299

Satellite: GRO
Catalog number: 21225
Epoch time: 94241.90549186
Element set: 132
Inclination: 28.4611 deg
RA of node: 80.2748 deg
Eccentricity: 0.0003652
Arg of perigee: 327.2031 deg
Mean anomaly: 32.8347 deg
Mean motion: 15.41184030 rev/day
Decay rate: 1.692e-05 rev/day^2
Epoch rev: 6832
Checksum: 264

Satellite: UARS
Catalog number: 21701
Epoch time: 94241.39185948
Element set: 583
Inclination: 56.9847 deg
RA of node: 225.7000 deg

Eccentricity: 0.0004627
Arg of perigee: 110.7536 deg
Mean anomaly: 249.3995 deg
Mean motion: 14.96472760 rev/day
Decay rate: -2.215e-05 rev/day^2
Epoch rev: 16189
Checksum: 322

/EX

Date: 1 Sep 1994 16:21:31 GMT
From: athos.cc.bellcore.com!briscas.gamekeeper.bellcore.com!papo@uunet.uu.net
Subject: Ragchewing conversational protocol
To: info-hams@ucsd.edu

In article <33o1t7\$eaj@geraldo.cc.utexas.edu>, oo7@astro.as.utexas.edu (Derek Wills) writes:

|> steve@vigra.com (Steve Haehnichen) says:

|>

|> >>Well well.. looks like I'm not alone! I've had my ticket for two
|> >>months or so, and I'm starting to get frustrated with the constant
|> [chomp]

|> >>myself simply can't imagine getting excited about QSL cards and

|> >>contests. :-) (To each their own, I guess.)

|>

|> I see a lot of posts like this. So can I ask, in what is meant to
|> be a completely non-inflammatory way, what attracted you to amateur
|> radio in the first place?

Well, I do not know Steve, Derek, but I got interested into Amateur Radio because it is cool :). Seriously, I have moved from CB and SWL to become an amateur operator. Now I'm a Tech+ going for General (knock on wood). I am interested into learning about the hobby, but sadly enough I've discovered that VHF is not the way to go. You're somebody after you get into HF and CW. This has been my perception so far. If they do talk about the hobby, that's fine and dandy. However it is hard to get to know people around, I have found that it is very rough to start on VHF. (Hence the reference to a bar full of couples) Yes, I know that a piece of paper will not make me more interesting or more handsome (yes, you can always lie unless it is on ATV :) :) :) but that does not mean that makes matters less forgiving. I've found that people tend to be more "friendly" on HF/CW. On VHF, if you are not member of The Club, or if you do not have a purpose for your QSO, you better get out of the way.

Expanding into other subjects besides ham radio is hard if you do not

know the other person, that usually comes up after a relationship is done. Clubs should help out, by joining them you know what to expect. But starting out of the blue? Eeeek!

Should I be discouraged? Hell no, I will not be discouraged, I'll keep bugging people around :). That does not mean that it does not hurt.

|> Derek Wills (AA5BT, G3NMX)
|> oo7@astro.as.utexas.edu

--

Luis Roberto Anaya-Rivera	papo@donuts0.bellcore.com
A True PL/1 Hacker	papo@briscas.gamekeeper.bellcore.com
Bellcore, NJ	Ham: N2ZXE+

Date: 3 Sep 94 00:10:39 GMT
From: news-mail-gateway@ucsd.edu
Subject: Remote Stalling of Automobile Engines
To: info-hams@ucsd.edu

Warren W. Gay VE3WWG [wwg@courts.UUCP] writes:

In article <Cv6sov.HvJ@armory.com> rstevew@armory.com (Richard Steven Walz) writes:
:In article <33jrgi\$81d@pandora.sf.ca.us>,
:Frank Hausman <fhausman@pandora.sf.ca.us> wrote:
:>Two methods were mentioned: a remote-controllable kill switch on the
:>car, and a remote controllable EMP generator in the road. EMP
:[...]
:>Note from a friend: A typical YAGI T.V. antenna generates 14 kilovolts
:>into 75 ohms from the the EMP generated by 10 megatons blast at 10
:>kilometers. Source: Nuclear Weapons & Technologies.
:[...]

[snip]

I don't think the EMP is the deciding factor for stopping the car in this case. There is a pretty good chance that the 8 psi overpressure wave would blast in the car windows (assuming they are up), and the 2.7 Km fireball would likely cause a fuss jamming traffic too. Your mileage may vary, you didn't specify the altitude of the burst, so I picked 900 feet. Altitude makes a big difference. I recommend the remote kill switch, significantly less collateral damage. :-)

Naw. A lot of hams have noticed that transmitting on 2 meters at say

50 Watts is enough to stall some newer cars. Its not effective on everything,
but its reported to work well on some 8-)

Other hams have found that it works even better on their own vehicles!

I havn't heard of anyone actually stopping their cars, just their warrantees.
:-)

[Note: I brought rec.radio.amateur.misc into this foray]

Noted.

Wm. A. Kirsanoff Internet: WAKIRSAN@ananov.remnet.ab.com
Rockwell International Ham: KD6MCI
(714) 762-2872
Alternate Internet: william_a._kirsanoff@ccmail.anatcp.rockwell.com

Who are you? * I am number 2. * Who is number 1? * You are number 6.

Date: Thu, 1 Sep 1994 10:46:45 GMT
From: netcomsv!netcom.com!joe@decwrl.dec.com
Subject: Why Some people hate Wayne Green
To: info-hams@ucsd.edu

The most interesting story is how Wayne Green lost Byte magazine - his wife left him and, in the divorce settlement, grabbed Byte magazine. I think she left him for one of his editors of Byte!!

I notice he never talks about that in his columns. Maybe someone can elaborate as the loss of Byte mag was a big deal...

--Joe

--

Joseph Jesson joe@netcom.com Day (312) 856-3645 Eve (708) 356-6817
21414 W. Honey Lane, Lake Villa, IL, 60046

Date: Thu, 1 Sep 1994 15:26:23 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!gatech!
newsxfer.itd.umich.edu!nntp.cs.ubc.ca!unixg.ubc.ca!quartz.uclb.ca!
gov.nt.ca!ve8ev@network.ucsd.edu
To: info-hams@ucsd.edu

References <Cv1M97.BFD@hpqmoea.sqf.hp.com>, <3429qc\$f2a@apple.com>,
<344hc5\$5an@news.duke.edu>h

Subject : Re: PLSE INCLUDE SASE FOR DIRECT DX QSL CARDS!!!

In article <344hc5\$5an@news.duke.edu> thomasr@acpub.duke.edu (Ronald Thomas)
writes:

> My two cents for the database! Keep in mind that I've been on HF
>for less than one-half year, so...
> I enjoy DX contacts and the QSL cards are a nice memory of the chats.
>I send QSL cards to all of the people for whom I can find addresses. This
>is something I enjoy doing. Even though I don't enjoy the costs involved,
>I never ask for a SASE. Seems to me that if each side of the contact deals
>with the postage, it comes out even---or am I missing something.

Yes Ron, you are missing something. And that is the fact some people's
cards are in higher demand than others. A station on a semi-rare
island in the Pacific might get dozens of cards a week depending on
how much he operated. To him filling box after box with W/VE cards
is not as exciting as for the guy at the other end who gets one
country closer to an award or something. When I first started out
I sent a card for every contact too but once I had enough to cover
every wall in the shack I stopped. I still gladly reply to all
incoming cards (SASE or not) but if a trickle of cards turned into
a flood I would very quickly reroute all non-SASE through the buro.

Another thing to keep in mind is that not everyone in the world
is blessed with low postal rates. There are several countries
where even a dollar or an IRC is not enough to mail a QSL card
1st class.

The long and short of it is if YOU WANT the other person's QSL
then send an envelope and appropriate postage because chances
are very good that if you want a card from them so do alot of
other people. Even for W/VE cards, many people will happily
trade cards with no postage or envelopes included but if you
need that card for WAS or VUCC or something then an envelope with
a stamp usually guarantees a prompt reply

73

=====
John Boudreau VE8EV INTERNET: ve8ev@amsat.org

Inuvik, NWT, CANADA PACKET: VE8EV@KL7GNG.#NAK.AK.USA.NA

=====

Date: 1 Sep 1994 08:27:49 -0400

From: ihnp4.ucsd.edu!news.cerf.net!gopher.sdsc.edu!news.tc.cornell.edu!
news.cac.psu.edu!howland.reston.ans.net!gatech!news-feed-1.peachnet.edu!
news.duke.edu!usenet@network.ucsd.edu

To: info-hams@ucsd.edu

References <Cv1DoL.5s1@world.std.com>, <Cv1M97.BFD@hpqmoea.sqf.hp.com>,
<3429qc\$f2a@apple.com>

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End of Info-Hams Digest V94 #986
